SOUTH

# HOUSTON

NORTH

## SECTIONAL AERONAUTICAL CHART
## SCALE 1:500,000

H 81/989-2

Lambert Conformal Conic Projection Standard Parallels 25°20′ and 30°40′

Topographic data corrected to May 1989

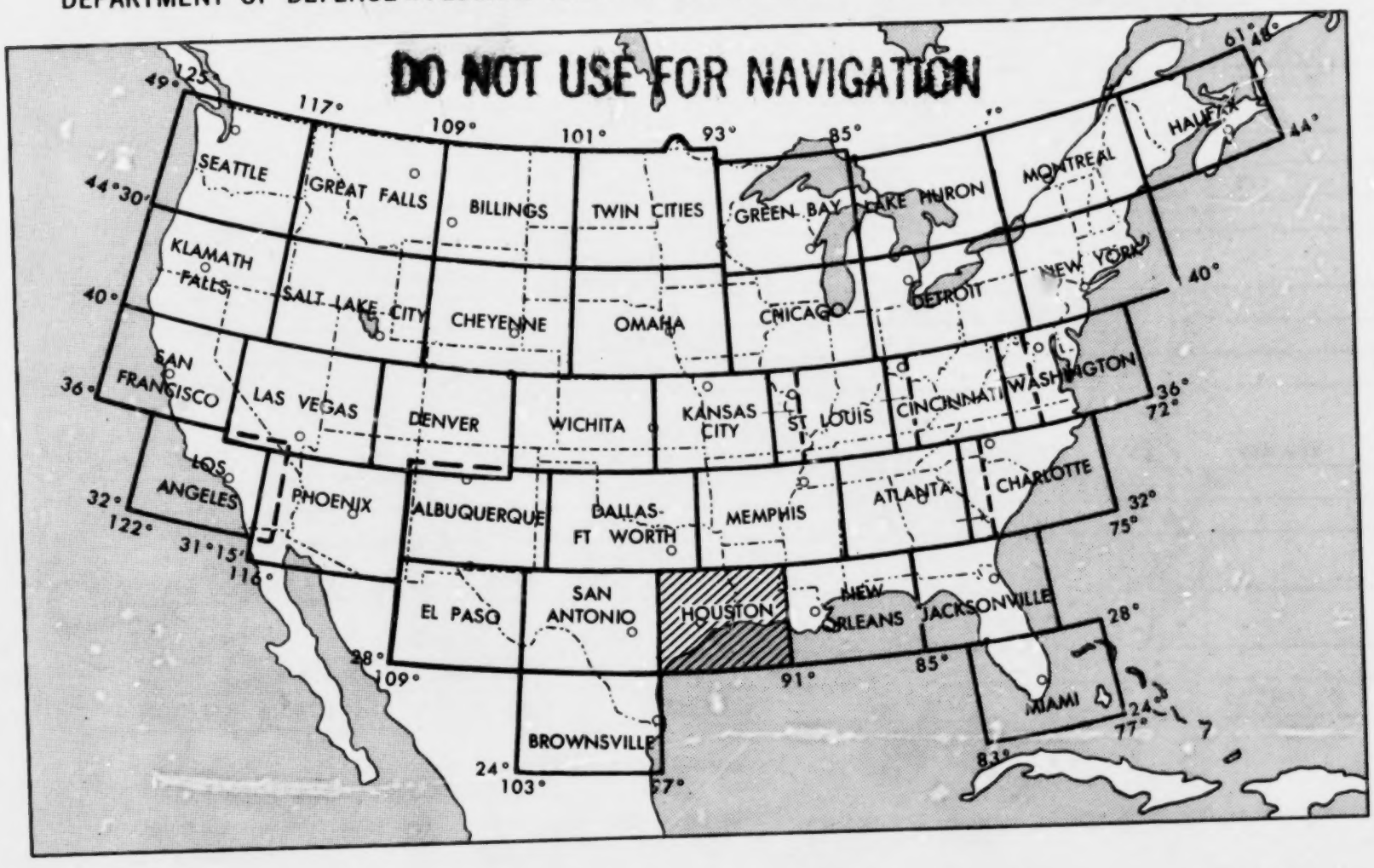
44 TH EDITION July 27, 1989

Includes airspace amendments effective July 27, 1989
and all other aeronautical data received by June 1, 1989
Consult appropriate NOTAM's and Flight Information
Publications for supplemental data and current information.

This chart will become **OBSOLETE FOR USE IN NAVIGATION** upon publication of the next edition scheduled for *FEBRUARY 8, 1990*

PUBLISHED IN ACCORDANCE WITH INTER-AGENCY AIR CARTOGRAPHIC COMMITTEE SPECIFICATIONS AND AGREEMENTS APPROVED BY

**DEPARTMENT OF DEFENSE * FEDERAL AVIATION ADMINISTRATION * DEPARTMENT OF COMMERCE**




**BASIC CONTOUR INTERVAL 500 *feet***
Intermediate contour 250 feet
Auxiliary contours 100 foot in rvals

—— 500 —— —— 250 —— —— 100 ——

**HIGHEST TERRAIN elevation is**
***765 feet***
**located at 31°48′N – 95°07′W**

**Critical elevation** ---------- •4254

**Approximate elevation** ---------- x3200

**Doubtful locations are indicated by omission of the point locator (dot or "x")**

**ATTENTION**

THIS CHART CONTAINS MAXIMUM ELEVATION FIGURES (MEF). The Maximum Elevation Figures shown in quadrangles bounded by ticked lines of latitude and longitude are represented in THOUSANDS and HUNDREDS of feet above mean sea level. The MEF is based on information available concerning the highest known feature in each quadrangle, including terrain and obstructions (trees, towers, antennas, etc.).

Example: 12,500 feet ..... **12⁵**

**MILITARY TRAINING ROUTES (MTRs)**

All IR and VR MTRs are shown, and may extend from the surface upwards. Only the route centerline, direction of flight along the route and the route designator are depicted – route widths and altitudes are not shown.

Since these routes are subject to change every 56 days, and the charts are reissued every 6 months, you are cautioned and advised to contact the nearest FSS for route dimensions and current status for those routes affecting your flight.

Routes with a change in the alignment of the charted route centerline will be indicated in the Aeronautical Chart Bulletin of the Airport/Facility Directory. Also, the VFR Wall Planning Chart is issued every 56 days and displays current route configurations and a composite tabulation of altitudes along these routes.

Military Pilots refer to Area Planning AP/1B Military Training Route North and South America for current routes.

765
Sea Level

CONVERSION OF ELEVATIONS

FEET (Thousands) 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30

METERS (Thousands) 0 1 2 3 4 5 6 7 8 9

Published at Washington, D.C.
U.S. Department of Commerce
National Oceanic and Atmospheric Administration
National Ocean Service

C 55.416/10:

WINDS

# HOUSTON
## LEGEND

NORTH

AIRPORTS

AIRPORT DATA

ADDITIONAL AIRPORT INFORMATION:

RADIO AIDS TO NAVIGATION AND COMMUNICATION BOXES

AIRPORT TRAFFIC SERVICE AND AIRSPACE INFORMATION

TOPOGRAPHICAL INFORMATION

OBSTRUCTIONS

MISCELLANEOUS

WINDS

# HOUSTON
## SECTIONAL AERONAUTICAL CHART
SCALE 1:500,000

Lambert Conformal Conic Projection; Standard Parallels 30°30' and 30°40'
Topographic data corrected to May 1989

44 TH EDITION JULY 27, 1989

Revised: Airport, airspace, and procedural data effective July 27, 1989, and all other aeronautical data reviewed to June 1, 1989.
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DEPARTMENT OF DEFENSE • FEDERAL AVIATION ADMINISTRATION • DEPARTMENT OF COMMERCE

DO NOT USE FOR NAVIGATION

BASIC CONTOUR INTERVAL 500 feet
Intermediate contour 250 feet
Auxiliary contours 100 feet or 50 feet

HIGHEST TERRAIN elevation is
765 feet
located at 31°48'N 95°07'W

Critical elevation ..... ▲754
Approximate elevation ..... +2700
Doubtful locations are indicated by omission of the point locator (dot or "+")

ATTENTION:

12⁵

MILITARY TRAINING ROUTES (MTRs)

765
feet (msl)

CONVERSION OF ELEVATIONS

Published at Washington, D.C.
U.S. Department of Commerce
National Oceanic and Atmospheric Administration
National Ocean Service

H 81/989-2

C 55.416/10:

Joins Dallas Ft Worth

Joins Memphis

Santa Fe Intercontinental

HOUSTON TERMINAL AREA

Pilots are encouraged to use the Houston VFR Terminal Area Chart for flights at and below 7000 feet. Terminal Area Charts provide greater detail and clarity of information in congested terminal areas.

TERMINAL CONTROL AREA ALTITUDES

INDIA 1 MOA

INDIA 2 MOA

INDIA 3 MOA

R-3803A

R-3804A

HOTROCK 1 MOA

A-381

BEAUMONT TRSA

FREQUENCY CHANGE

JONES MOA
LADY MOA
JENA 1 MOA
JENA 2 MOA
INDIA 1 MOA
INDIA 2 MOA
INDIA 3 MOA
R-3803A
R-3801A
R-3801B-C
RESTRICTED R-3804A
RESTRICTED R-3806
HOTROCK 3 MOA
HOTROCK 1 MOA
HOTROCK 2 MOA
LAKE CHARLES TRSA
BEAUMONT TRSA
MONROE TRSA
NEW ORLEANS TERMINAL AREA

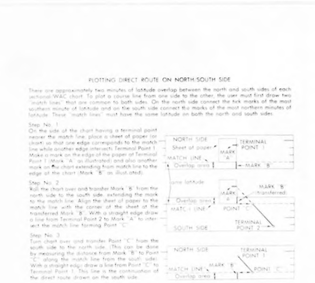
PLOTTING DIRECT ROUTE ON NORTH/SOUTH SIDE

There are approximately two minutes of latitude overlap between the north and south sides of each sectional WAC chart. To plot a course line from one side to the other, the user must first draw two 'match lines' that are common to both sides. On the north side connect the tick marks of the most southern minute of latitude and on the south side connect the marks of the most northern minutes of latitude. These 'match lines' must have the same latitude on both the north and south sides.

Step No. 1
On the side of the chart having a terminal point nearer the match line, place a sheet of paper so its upper or lower edge coincides with the match line (or must one edge coincide with the nearest Control Point 1 - Mark 'A' as illustrated) and also another mark on the chart extending from match line to the edge of the chart (Mark 'B' as illustrated).

Step No. 2
Roll the chart over and transfer Mark 'B' from the north side to the south side, extending the mark to the match line. Align the sheet of paper to the match line with the corner of the sheet at the transferred Mark 'B' with a straight edge drawn to line from Terminal Point 2 to Mark 'A' to intersect the match line Terminal Point.

Step No. 3
Turn chart over and transfer Point 'C' from the south side to the north side. This can be done by measuring the distance from Mark 'B' to Point 'C' along the match line from the south side. With a straight edge, draw a line from Point 'C' to Terminal Point 1. This line is the course of the direct route drawn on the south side.




CONTROL TOWER FREQUENCIES ON HOUSTON SECTIONAL CHART

Airports which have control towers are indicated on this chart by the letters CT followed by the primary VHF local control frequency. Selected transmitting frequencies for each control tower are indicated in the adjoining space, the low or medium transmitting frequency is denoted by the letter 'L' and the high frequency by the letter 'H'. Frequencies shown in parentheses are secondary. Hours of operation of control towers are local. Hours of Automatic Terminal Information Service (ATIS) broadcasts are also local. Radio call provided if different from tower name.

Automatic Terminal Information Service (ATIS) frequencies, shown on the face of the chart are normal arriving frequencies. All ATIS frequencies broadcast are tabulated below.

ASR and/or PAR indicates Radar instrument Approach available.

| CONTROL TOWER | RADIO CALL | OPERATES | ATIS | FREQ | ASR/PAR |
|---|---|---|---|---|---|
| BEAUMONT MUNICIPAL AP | BEAUMONT | 0630-1630 MON-FRI | | 120.0 | ASR |
| BATON ROUGE METRO (P) AP | RYAN | CONTINUOUS | 125.2 | 118.3 257.8 | ASR |
| CHENNAULT INDUSTRIAL AP | CHENNAULT | 0800-1700 MON-FRI<br>0800-1500 SATSUN | | 124.2 284.6 | |
| EASTWOOD | HAM ZONE | 1345 | | 119.3 284.7 | |
| ELLINGTON | ELLINGTON | CONTINUOUS | 134.2 269.9 | 127.2 255.3 | |
| ENGLAND AFB | ENGLAND | 0700-2300 MON-FRI<br>0900-700 SAT SUN & HOL | 270.1 | 126.2 255.8 | ASR/PAR |
| ELLER MEMORIAL | ELLER | 1100-0100 | | 118.0 324.3 | |
| HOBBY | HOBBY | CONTINUOUS | 124.8 | 119.7 256.9 | |
| HOUSTON INTCNTL | HOUSTON | CONTINUOUS | 124.95 | 118.4 393.1 | |
| HOUMA TERREBONNE | HOUMA | 0630-2100 MON-FRI<br>0800-2100 SAT SUN | | 123.3 | |
| HOUSTON INTCNTL | | CONTINUOUS | 124.05 | 118.1 270.05 | |
| JACKSON | JACKSON | 0630-2300 | 269.3 | 119.5 255.5 | ASR |
| LAFAYETTE REGIONAL | LAFAYETTE | 0630-2300 | 120.5 | 118.9 257.8 | ASR |
| LAKE CHARLES | LAKE CHARLES | 0630-2300 | 120.7 | 127.8 257.8 | ASR |
| WOLF CAMP | WOLF CAMP | CONTINUOUS | | 119.0 249.2 | ASR/PAR |

TCA, ARSA, TRSA, AND SELECTED RADAR APPROACH CONTROL FREQUENCIES

| | |
|---|---|
| HOUSTON TCA | 118.7 269.0 (APP)<br>119.7 390.0 (APP)<br>120.8 284.0 (APP)<br>269.2 (DEP) |
| BATON ROUGE ARSA | 120.1 278.1 (APP)<br>269.2 (DEP) |
| HOUSTON-HOBBY ARSA | 120.3 284.1 (APP) NORTH AND EAST<br>269.2 (DEP) SOUTH |
| LAFAYETTE ARSA | 124.1 278.1 (APP)<br>269.2 (DEP) |
| LAKE CHARLES TRSA | 119.35 * 149.4 (APP)<br>278.6 (DEP) 149 * |
| ENGLAND AFB | 118.2 289.1 |
| ALEXANDRIA INTCNTL | 119.0 (APP) |
| ROCK AAF | 118.35 343.8 |
| HOUSTON APP CONT | |

SPECIAL USE AIRSPACE ON HOUSTON SECTIONAL CHART

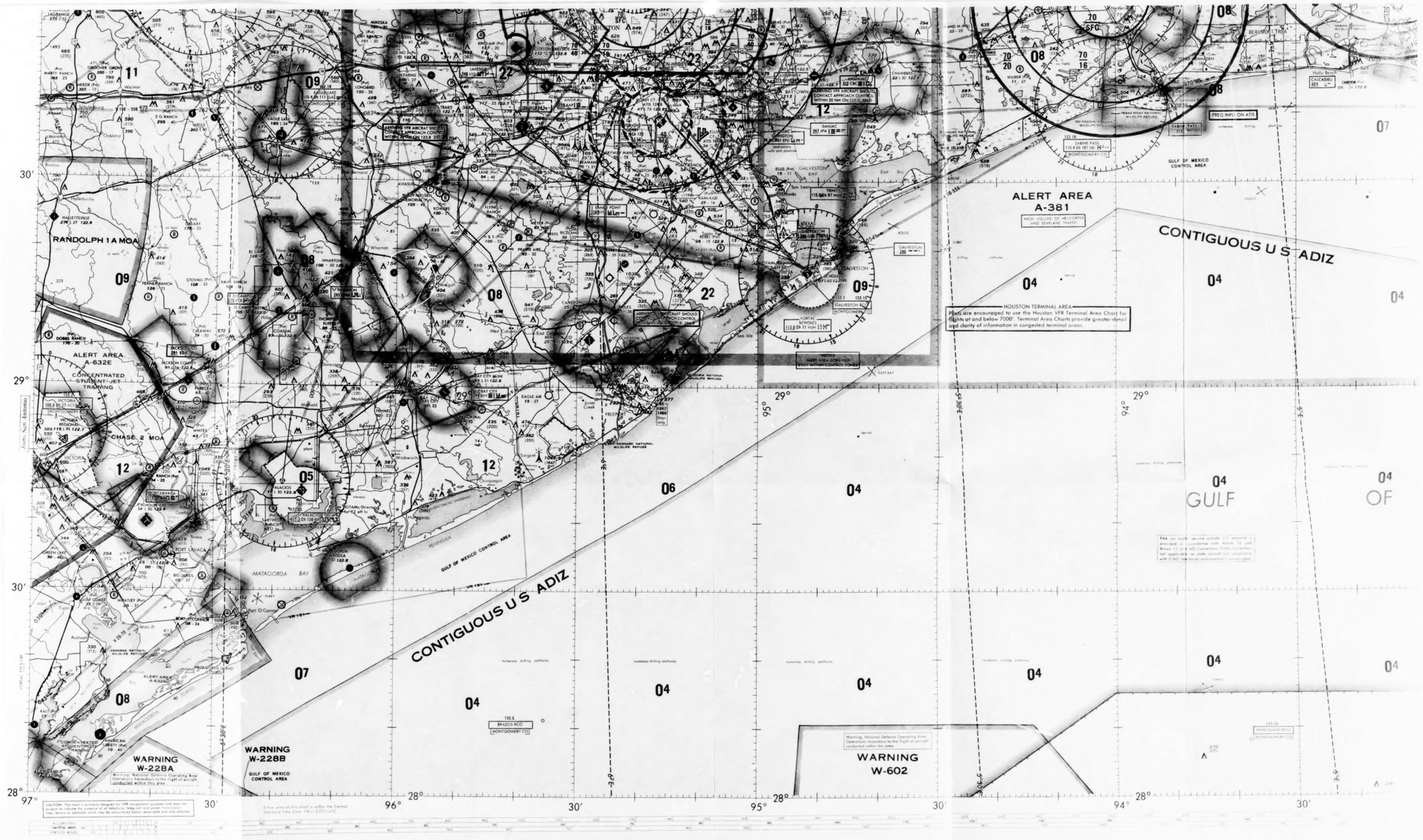
Unless otherwise specified, altitudes are mean sea level (MSL). The word "AGL" or altitudes above ground level (AGL) will be added to the altitude. To avoid confusion, the contracting agency should be contacted for information concerning the altitude of the restricted area.

U.S. P-PROHIBITED, R-RESTRICTED, A-ALERT, W-WARNING, MOA-MILITARY OPERATIONS AREA

| NUMBER | LOCATION | ALTITUDE | TIME OF USE | CONTROLLING AGENCY |
|---|---|---|---|---|
| R-3901 A | CAMP CLAIBORNE, LA | 1500 AGL TO 4000 MSL<br>OR 1000 FEET ABOVE HIGHEST OBSTACLE WITHIN 5 STATUTE MILES OF THE FOLLOWING POINTS:<br>31°37'54"N 92°57'W<br>31°34'30"N<br>92°46'30"W<br>31°30'N 92°40'W<br>500' AGL TO 4000' SE OF | CONTINUOUS | ZHU CNTR |
| R-3901 B | CAMP CLAIBORNE, LA | TO 1500 | CONTINUOUS | ZHU CNTR |
| R-3901 C | CAMP CLAIBORNE, LA | 7000 TO 14,000 | CONTINUOUS<br>A 3901 C SHALL NOT BE ACTIVATED UNLESS THE HOUSTON ARTC CENTER RADAR (ALEXANDRIA SYSTEM) IS OPERATIONAL | ZHU CNTR |
| R-3903 A | FORT POLK, LA | TO FL 180 | CONTINUOUS | ZHU CNTR |
| R-3904 A | FORT POLK, LA | TO FL 180 | CONTINUOUS | ZHU CNTR |
| R-3904 B | FORT POLK, LA | TO 3000 | CONTINUOUS | ZHU CNTR |
| R-3906 | ENGLAND AFB, LA | 500 AGL TO 3000<br>EXCLUDE BELOW 1000 AGL WITHIN 2 NM RAD OF 31°19'30"N 92°33'30"W | DAYS, MON-FRI | ZHU CNTR |
| R-43 | NEW ORLEANS, LA | TO FL 400 | 0700-2400 | ZHU CNTR |
| W-228A | CORPUS CHRISTI, TX | TO FL 410 | CONTINUOUS | ZHU CNTR |
| W-228B | CORPUS CHRISTI, TX | TO FL 410 | CONTINUOUS | ZHU CNTR |
| W-602 | GULF OF MEXICO SOUTH OF HOUSTON, TX | TO FL 400 | 0700-2400 MON-SAT | ZHU CNTR |
| A-381 | GULF COAST | TO 2500 | DLY DAYLIGHT HOURS | |
| A-632 B | CORPUS CHRISTI, TX | TO BUT NOT INCL FL 180 | SR-2400 MON-FRI | |
| A-632 C | CORPUS CHRISTI, TX | 8000 TO BUT NOT INCL 18000 | SR-2400 MON-FRI<br>1400-2400 SUN | |
| A-632 F | CORPUS CHRISTI, TX | 8000 TO BUT NOT INCL FL 180 | 0700-2400 MON-SAT | |

| MOA NAME | ALTITUDE OF USE* | TIME OF USE† | CONTROLLING AGENCY |
|---|---|---|---|
| CHASE 2 | 9000 | SR-2400 MON-FRI<br>1400-2400 SUN | ZHU CNTR |
| HOTROCK | 100 AGL TO 3000 | SR-SS DAILY | ZHU CNTR |
| HOTROCK 2 | 100 AGL | SR-SS DAILY | ZHU CNTR |
| HOTROCK 3 | 6000 | SR-SS DAILY | ZHU CNTR |
| INDIA 1 | 500 TO 2500 | 0600-2200 MON-FRI | ZHU CNTR |
| INDIA 2 | 500 TO 8000 | 0600-2200 MON-FRI | ZHU CNTR |
| INDIA 3 | 500 TO 15,000 EXCL AIRSPACE WITHIN R 3803A | 0600-2200 MON-FRI | ZHU CNTR |
| ZUNI 1 | 100 AGL | SR-SS DAILY | ZHU CNTR |
| ZUNI 2 | 6000 | SR-SS DAILY | ZHU CNTR |
| JONES | 7000 | SR-SS MON-FRI | ZFW CNTR |
| LAZY | 10,000 | SR-SS MON-FRI | ZFW CNTR |
| RANDOLPH 1A | 9000 | SR-SS MON-FRI | ZHU CNTR |

*Altitudes indicate floor of MOA. All MOA's extend to but do not include FL 180 unless otherwise indicated in footnotes on chart.


RANDOLPH 1A MOA
ALERT AREA A-632E
CONCENTRATED STUDENT JET TRAINING
CHASE 2 MOA
ALERT AREA A-632C
ALERT AREA A-632B
WARNING W-228A
Warning, National Defense Operating Area Operations hazardous to the flight of aircraft conducted within this area
WARNING W-228B
GULF OF MEXICO CONTROL AREA
ALERT AREA A-381
HIGH VOLUME OF HELICOPTER AND SEAPLANE TRAFFIC
CONTIGUOUS U S ADIZ
HOUSTON TERMINAL AREA
Pilots are encouraged to use the Houston VFR Terminal Area Chart for flights at and below 7000'. Terminal Area Charts provide greater detail and clarity of information in congested terminal areas.
WARNING W-602
Warning, National Defense Operating Area Operations hazardous to the flight of aircraft conducted within this area.
GULF OF MEXICO CONTROL AREA
FREQ INFO ON ATIS
MATAGORDA BAY
PENINSULA
GULF
OF
CAUTION: This chart is primarily designed for VFR navigational purposes and does not purport to indicate the presence of all obstacles, telegraph and power wires, or other lines, fences or obstacles which may be encountered below reasonable and safe altitudes.
Entire area of this chart is within the Central Standard Time Zone (+6 hr = GMT)
30°
29°
28°
97°
96°
95°
94°

HOUSTON

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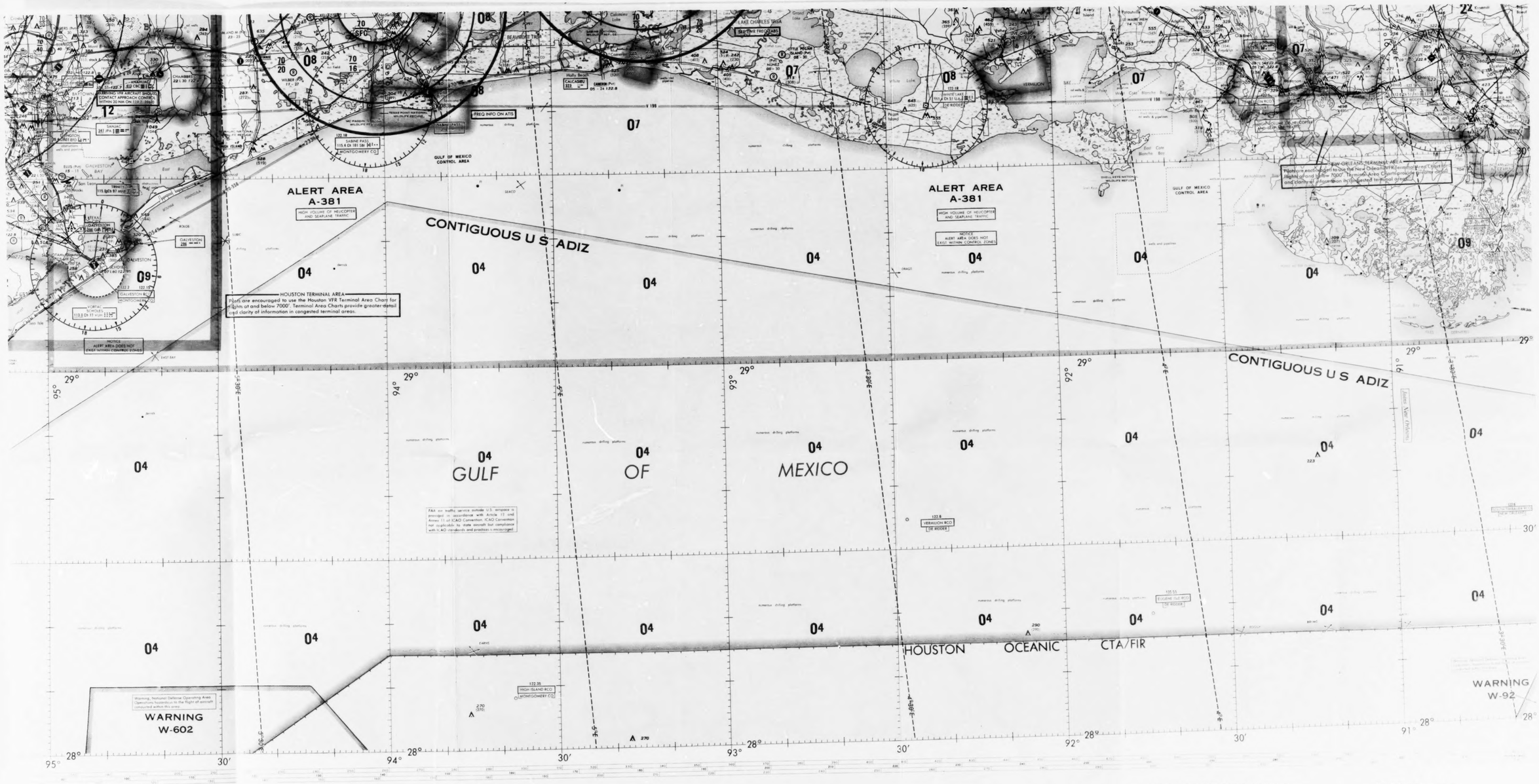


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Uncontrolled airspace within the United States extends up to 14,500 feet MSL. At and above this altitude all airspace is within the Continental Control Area, excluding the airspace less than 1500 feet above the terrain and certain special use airspace areas.

REGULATIONS REGARDING FLIGHTS OVER CERTAIN NATIONAL PARK SERVICE AREAS, U.S. FISH AND WILDLIFE SERVICE AREAS, AND U.S. FOREST SERVICE AREAS

The landing of aircraft is prohibited on lands or waters administered by the National Park Service, U.S. Fish and Wildlife Service or U.S. Forest Service without authorization from the respective agency. Exception: Include: 1) when forced to land due to an emergency beyond the control of the operator; 2) at officially designated landing sites; or 3) on approved official business of the Federal Government.

All persons are requested to maintain a minimum altitude of 2,000 feet above the surface of the following National Parks, Monuments, Seashores, Lakeshores, Recreation Areas and Scenic Riverways administered by the National Park Service, National Wildlife Refuges, Big Game Refuges, Game Ranges and Wildlife Ranges administered by the U.S. Fish and Wildlife Service, and Wilderness and Primitive areas administered by the U.S. Forest Service. FAA Advisory Circular AC 91-36C, "Visual Flight Rules (VFR) Flight Near Noise-Sensitive Areas," defines the surface as the highest terrain within 2,000 feet laterally of the route of flight or the upper most rim of a canyon or valley.

Federal regulations also prohibit airdrops by parachute or other means of persons, cargo or objects from aircraft on lands administered by the three agencies without authorization from the respective agency. Exceptions include: 1) emergencies involving the safety of human life; or 2) threat of serious property loss.

Boundary of National Park Service areas, U.S. Fish and Wildlife Service areas and U.S. Forest Service Wilderness and Primitive areas

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HOUSTON

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ALERT AREA
A-381
HIGH VOLUME OF HELICOPTER AND SEAPLANE TRAFFIC

CONTIGUOUS U S ADIZ

HOUSTON TERMINAL AREA
Pilots are encouraged to use the Houston VFR Terminal Area Chart for flights at and below 7000'. Terminal Area Charts provide greater detail and clarity of information in congested terminal areas.

GULF OF MEXICO CONTROL AREA

FREQ INFO ON ATIS

NEW ORLEANS TERMINAL AREA
Pilots are encouraged to use the New Orleans VFR Terminal Area Chart for flights at and below 7000'. Terminal Area Charts provide greater detail and clarity of information in congested terminal areas.

FAA air traffic service outside U.S. airspace is provided in accordance with Article 12 and Annex 11 of ICAO Convention. ICAO Convention not applicable to state aircraft but compliance with ICAO standards and practices is encouraged.

HOUSTON OCEANIC CTA/FIR

WARNING
W-602
Warning, National Defense Operating Area. Operations hazardous to the flight of aircraft conducted within this area.

WARNING
W-92

GULF OF MEXICO

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Boundary of National Park Service areas, U.S. Fish and Wildlife Service areas and U.S. Forest Service Wilderness and Primitive areas

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